

Minutes for Rule 21 Working Group Meeting #67

June 3, 2005

**California Energy Commission
Sacramento, CA**

Help Desk 6/13/05 8:25 AM
Formatted: Font:12 pt

There were 27 Working Group members in attendance in person or conferenced in by telephone. The next regular meeting of the Working Group is scheduled for July 13, at SCE in Fullerton.

Scott Tomashefsky, Chair

| | | | | | |
|-----------|---------|-------------------------|-----------|----------|-----------------|
| Allured | Charles | Erg & Pwr Solution | Prabhu | Edan | Reflective Enrg |
| Becker | Richard | MMR | Robinson | Mark | NEXTEK Pwr |
| Blumer | Werner | CPUC/ED | Sankhu | Paul | PG&E |
| Brown | David | SMUD | Savidge | Dylan | PG&E |
| Cummings | Fran | Mass Tech Collaborative | Sheriff | Nora | CAC/EPUC |
| Goh | Jeff | PG&E | Simpson | Joe | Joe Simpson |
| Iammarino | Mike | SDG&E | Skillman | Susan | PG&E |
| Jackson | Jerry | PG&E | Solt | Chuck | Lindh & Assoc |
| Jolivet | Renee | PG&E | Sorter | Chuck | BluePoint Enrg |
| Lacy | Scott | SCE | Torribio | Gerome | SCE |
| Mazur | Mike | 3 Phases Ergy Serv | Tunncliff | Dan | SCE |
| McAuley | Art | PG&E | Vaziri | Mohammad | PG&E |
| Ng | Steven | PG&E | Whitaker | Chuck | BEW Enrg |
| Panora | Bob | Tecogen | | | |

Combined Process and Technical Group

Utility DG Activity Reports

Meeting materials included SDG&E and SCE reports thru the end of April. PG&E will have the first quarter report by June 9.

Rule 21 Revisions Advice Letter Progress and Status

PG&E expects to file its version of the tariff update before the next meeting.

Rule 21 Application Forms

SDG&E and SCE are approved. PG&E will file by the next meeting.

CRS Quarterly Data Reports (Per CPUC Resolution E-3831)

No progress to report.

IEEE 1547 Interconnection Standard Activity

The IEEE 1547.1 testing standard should be adopted this month. There will be a meeting in Arlington VA in August to continue work on 1547.2 (Application Guide), 1547.3 (Information Exchange, Communication Protocol), 1547.4 (Intentional Islanding) and 1547.6 (Networking).

1547.5 (Over 10 MW) will not be addressed at the August meeting but will be covered in kick-off meeting to be held at the IEEE PES General Meeting at the San Francisco Hilton in the room Union Square 9 on Wednesday, 15 June 2005 between 10:00 am and 12:00 noon. Contact Mallur.N.Satyanarayan@xcelenergy.com to be added to the working group for that document.

FERC DG Rulemaking – [Order 2006](#)

FERC adopted Order 2006 on May 12, 2005. There are a number of questions to be resolved. It is unclear who has jurisdiction in a number of areas, state or federal. IEEE 1547 addresses less than 10 MW, but FERC 2006 is limited to 20 MW. Interconnection agreements, WDAT and power delivery may be overlapping in areas and these will need resolution at some time.

FOCUS Interconnection Monitoring Study:

The guidelines for site selection ([FOCUS III Guidelines](#)) were made available for comment by WG members before the last meeting. No comments were received. At the meeting, some utility representatives questioned the value of the monitoring program. There was some opinion that testing is a better way to determine impact than monitoring. The primary concern expressed with regard to the monitoring program is that it is unlikely to capture “events”, since the monitoring is limited, and the events are rare. The concern was that regulators and other may view the results of the monitoring and conclude that DG has no adverse impact on the grid. Other comments were that while it doesn’t resolve all problems, it is also important to find out how DG as it is going in today impacts the grid, if at all. The monitoring program provides the current status of things, not the ultimate possible impact. The DUIT program, on the other hand, does plan to test for the limits of the system.

New York and Massachusetts are both considering monitoring of network connected DG systems... Reflective Energies, is part of a multi-state collaborative to see whether integration of these programs makes sense. so that all monitoring is captured on www.dgmonitors.com.

Remote DG Interconnection Delays

Neither RCM Digesters nor Valley Air Solutions provided a statement of the problem, or attended the meeting. The issue will be held until the WG receives input.

DG that is Not Operating in Parallel

Mark Robinson sent an email to Jerry Jackson asking for clarification of PG&E’s concerns. Jerry [responded](#). PG&E would as a minimum like to use the Rule 21 application to identify departing load that may be responsible for some exit fee components and generation that may, at some time, be required to pay standby fees. The WG discussed PG&E’s concerns. In general it was felt that there is no problem with PG&E requiring the customer to fill out an application form, provided no fees are charge. As things stand, the solar NEM tariff does not allow interconnection fees, so this type of DG should also be exempt.

Redundant Relay Requirement

Steven Ng presented a PG&E position [paper](#) on the issue, describing the conditions under which they require the use of redundant relays. PG&E suggested that either Rule 21 should be modified to identify PG&E’s requirements, or that PG&E will amend its DG Guidance Document to incorporate the requirement. The WG is not inclined to change the Rule. Other utilities often do not require such redundant relays on small DG systems. PG&E may state the requirement in its Guidance Document if it chooses. It is preferred that all utilities do things the same way. PG&E will discuss this internally and bring it back to the WG.

Process Breakout Group Notes

Action Item C 147 – *DG Reporting Requirements*

The joint workshop between the PUC and CEC that was originally scheduled for June 2 has been delayed until late July. This workshop is to deal with redundant utility reporting requirements on DG activities. There will probably be a preliminary meeting to discuss reporting needs.

Action Item P 131 – *Interconnection Agreement for Continuous Export for Sale*

There was discussion on whether the Interconnection Agreement must/should be combined with an Operating Agreement or a Power Purchase Agreement or both. PG&E will attempt to merge the SDG&E export agreement with an operating agreement and determine if it can be shared with the group. They hope to have a draft by the next meeting.

Action Item P 109 – *Utility bill insert*

Timing of this action item is being tied to SB 1. The WG feels that the solar initiative will be a good basis for the first insert.

Technical Breakout Group Notes

Action Item T113 – *Backup/Redundancy vs single failure/fail safe.*

Discussion from combined group continued. PG&E's redundancy requirement is limited to detection (not CT's, not breakers, etc). They would accept something other than redundant relay if it can be shown to provide similar levels of protection. PG&E has applied their requirement consistently to all primary served customers (loads and DG), and to secondary metered DG using rotating machines. PG&E does not require redundancy on inverters because of their benign nature. The group discussed various forms of redundancy and other ways of dealing with single-point of failure. In the end, PG&E has a strict policy that needs to be made clear to parties wishing to interconnect, i.e., within Rule 21 Section D.1.c, following the existing sentence "Producer's Generating Facility and Interconnection Facilities shall be designed so that the failure of any single device or component shall not potentially compromise the safety and reliability of EC's Distribution System.", add a new sentence that describes the conditions under which redundant relaying would be required). However, the other utilities (SCE and SMUD were present at the meeting) felt that the existing language provided sufficient discretion for requiring redundancy in those special cases where they deem it necessary and would not support a change to the consensus Rule 21 document. Therefore, such a change would only be reflected in the PG&E version of the document. It was pointed out by several participants that this approach is contradictory to the goal of consistent requirements across the state.

Action Item T134 – *Network Interconnection.*

Reviewed Dave Brown's write up of types and locations of network secondary distribution systems within California. Quantifying information, now presented city by city, will be compiled in a single table.

Reviewed the Massachusetts DG Collaborative annual report, Chapter 2, which also deals with Network Interconnection. Pointed out that we should review Table 2.12, which discusses technical challenges; and solutions to those challenges.

Moh Vaziri mentioned that PG&E was developing a new set of interconnection requirements for networks that he hopes to be able to share soon.

Action Item T138 – *Certification Requirements - Implementation of IEEE 1547.1.*

Chuck Whitaker gave an overview of the meeting he attended the two prior days dealing with changes to UL 1741 based on the approval of IEEE 1547.1. The group discussed how much of Rule 21 Section J should be replaced with simple references to IEEE 1547.1/UL1741 should be referenced, how much Rule 21 text do we leave or modify to comply with those standards.

Whitaker will provide, at the next meeting, a game plan for addressing 1547.1 implementation,.